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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/240,975	01/29/99	MITSUISHI	N HIT-2-010-1-

024956 TM02/0619
MATTINGLY, STANGER & MALUR, P.C.
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ALEXANDRIA VA 22301

EXAMINER

BRAGDON, R

ART UNIT	PAPER NUMBER
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2185

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DATE MAILED:

06/19/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

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Office Action Summary

Application No.
09/240,975

Applicant(s)
Mitsulshi

Examiner
Reginald Bragdon

Art Unit
2185



— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on May 31, 2001
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.
- ## Disposition of Claims
- 4) ☒ Claim(s) 21-30 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirements.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 2 20) ☐ Other: _____

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DETAILED ACTION

1. Claims 21-30 are pending in the application.

Continued Prosecution Application

2. The request filed on 5-31-2001 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 09/240,975 is acceptable and a CPA has been established. An action on the CPA follows.

Information Disclosure Statement

3. Applicant states that EPO 081 873 corresponds to U.S. Patent No. 4,665,480. U.S. Patent No. 4,665,480 has been considered by the Examiner and added to a PTO-892 accompanying this office action. Documents EPO 081 873 and FR 2,430,065 are being considered based on Applicant's statement in the response of 5-31-2001 that U.S. Patents 4,665,480 and 4,279,024 are English language equivalents of the respective foreign documents.
4. "Hitachi Microprocessor Data Book, 8 Bit Single Chip", pages 825 and 838-842 has been considered to the extent made possible by the translated portions of the figures provided and Applicant's statement in the response of 5-31-2001.
5. The French Search Report dated July 17, 1992 has been considered to the extent made possible by Applicant's statement in the response of 5-31-2001.

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6. See the attached copy of the original IDS filed 1-29-1999, where the documents in question have been considered by the Examiner.

Claim Objections

7. Claims 21-23 are objected to because of the following informalities:

As per claim 21, line 14 (clean copy), "address" should be --addresses in the address--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 21-22, 24-25, and 27-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Ugon (4,382,279).

As per claims 21, 24, and 28-30, Ugon teaches a microprocessor architecture including an EPROM 101 (see figure 2, section M2, and column 6, lines 10-11), a ROM section ("a memory"; see figure 2, section M1, and column 6, lines 5-8), and a processing and control unit 104 ("CPU"; see figures 1-2). Evolving or modifiable data or instructions, including a processing program, are stored in the section M2 ("an [EPROM] which has a first area to store a user program...and a

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second area to store data”, where individual addresses within the M2 section represent “areas”; see column 5, lines 24-26 and column 6, lines 4-5). The section M1 contains a subprogram “PROG” (“write control program” or “second program”) which performs the functions required for writing to the memory. See column 6, lines 63-66. The M1 and M2 sections are inherently located at mutually different addresses within the address space of the processing and control unit 104.

A main program running includes an instruction, CALL PROG, which calls or jumps to the PROG subroutine. See column 7, lines 55-65. The subroutine includes a return instruction, RET, which causes the subroutine to be exited and control returned to the main program. See column 7, lines 34-54, in particular line 54.

Furthermore, Ugon teaches a bus D which provides addresses to address registers A1 102 and A2 103 as well as data to data register D 106. Although Ugon does not specify whether this bus is comprised of physically separate address and data busses or a multiplexed address/data bus, Applicant appears to be assuming that the bus is a multiplexed address/data bus. However, a multiplexed address/data bus would meet the claim limitations since at one point in time the bus is dedicated to providing address data to the address registers A1 102 and/or A2 103 and at another time dedicated to providing data to data register D 106. Therefore, Ugon teaches “a data bus” and “an address bus”.

As per claims 22 and 25, Ugon teaches that the subroutine “PROG” is located in ROM memory. See column 6, lines 5-8 and 63-66.

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As per claims 27, Ugon teaches that subroutine "PROG" performs the functions required for writing to the memory. See column 6, lines 63-66.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 23 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ugon.

Ugon does not teach that the "memory" set forth as section M1 is a random access memory (RAM) or that the subroutine "PROG" is copied to the RAM for execution. It would have been obvious to one of ordinary skill in the art to have replaced the memory set forth as section M1 with a RAM and to copy the subroutine "PROG" from the EPROM to the RAM because removing the ROM would reduce the cost of manufacture by having to create only one memory (i.e. EPROM) storing the running program and the subroutine instead of two memories (i.e. EPROM and ROM) each storing different programs while utilizing the RAM (as a "shadow memory") would provide fast access to the subroutine program when modifying the EPROM.

Response to Arguments

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12. Applicant's arguments filed 5-31-2001 have been fully considered but they are not persuasive.

Applicant states that the amendments presented in the response filed 5-31-2001 would have required further search and/or consideration after-final. The Examiner notes that no after-final amendment was filed and therefore no advisory action issued by the Office indicating that the amendments would require further search and/or consideration. Since all of the claims are drawn to the same invention claimed in the parent application prior to the filing of this Continued Prosecution Application under 37 CFR 1.53(d), and could have been finally rejected on the grounds and art of record in the next Office action (i.e. this office action), this office action will be made final.

Applicant also states that the amended claims are patentable for the reasons set forth in the previous amendment of 11-20-2000. Since it appears that the presently amended claims are the same invention as set forth in the amendment of 11-20-2000, then the Examiner's comments in the Office action of 1-3-2001, referring to Applicant's arguments in the amendment/response of 11-20-2000, stand, and Applicant should refer to the office action of 1-3-2001 (paper no. 11) for those comments. Applicant should particularly point out any claim language in the present claims that Applicant feels distinguishes the present claim amendments from the previous claim amendments and how the present amendments distinguish the claims from the prior art applied in the rejections.

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Conclusion

13. All claims are drawn to the same invention claimed in the parent application prior to the filing of this Continued Prosecution Application under 37 CFR 1.53(d) and could have been finally rejected on the grounds and art of record in the next Office action. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing under 37 CFR 1.53(d). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

14. **Any response to this final action should be mailed to:**

Box AF

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

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(703) 305-9051, (for formal communications; please mark "EXPEDITED PROCEDURE")

Or:

(703) 305-9731 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

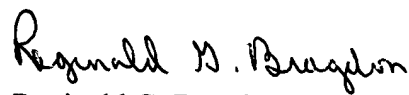
Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reginald G. Bragdon whose telephone number is (703) 305-3823. The examiner can normally be reached on Monday-Thursday from 7:00 AM to 4:30 PM and every other Friday from 7:00 AM to 3:30 PM.

The examiner's supervisor, Matthew Kim, can be reached at (703) 305-3821.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

RGB
June 14, 2001


Reginald G. Bragdon
Primary Patent Examiner
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